

IN THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Previously Presented) A light-emitting device comprising:
a semiconductor light emitting diode capable of emitting light of a first wavelength, the semiconductor light emitting diode having an area;
a light-emitting surface disposed in the path of light emitted from the semiconductor light emitting diode, the light-emitting surface having an area corresponding to the area of the semiconductor light emitting diode, and
a phosphor layer provided on a first portion of the light-emitting surface, wherein the phosphor layer is capable of converting light of the first wavelength to visible light of a second wavelength,
wherein a second portion of the light-emitting surface is without the phosphor layer, and wherein the second portion is substantially surrounded by the first portion.
2. (Previously Presented) A device as claimed in claim 1, wherein the sizes of the first portion and the second portion are such that mixing the emitted light of the first and the second wavelength results in substantially white light.
3. (Previously Presented) A device as claimed in claim 1, wherein the thickness of the phosphor layer is such that all the light of the first wavelength incident on the phosphor layer is converted to light of the second wavelength.
4. (Previously Presented) A device as claimed in claim 1, wherein the second portion without the phosphor layer is distributed over a plurality of regions on the light emitting surface.
5. (Previously Presented) A device as claimed in claim 4, wherein the plurality of regions form a pattern.

PATENT LAW
GROUP LLP
2035 N. FIRST ST.
SUITE 225
SAN JOSE, CA 95134
(408) 383-0483
FAX (408) 383-0481

6. (Previously Presented) A device as claimed in claim 1, wherein the second portion without the phosphor layer is at least partly covered with a light-transmitting layer which is capable of spreading light incident on said second portion.

7. (Canceled).

8. (Previously Presented) A device as claimed in claim 1, wherein the lighting device further comprises optical elements for mixing the emitted light of the first and the second wavelength.

9. (Previously Presented) A method of manufacturing a light-emitting device, the method comprising:

providing a semiconductor light emitting diode capable of emitting light of a first wavelength, the semiconductor light emitting diode having a light-emitting surface, and

providing a phosphor layer on the light-emitting surface, which phosphor layer is capable of converting light of the first wavelength to visible light of a second wavelength,

wherein the phosphor layer is removed from, or not provided on, a portion of the light-emitting surface substantially surrounded by the phosphor layer.

10. (Previously Presented) A method as claimed in claim 9, wherein the phosphor layer is provided on the light-emitting surface by means of screen printing.

11. (Previously Presented) A device as claimed in claim 1, wherein the second portion is completely surrounded by the first portion.

12. (Previously Presented) A device as claimed in claim 1, wherein the second portion is disposed in a path of light emitted by the diode.

13. (Previously Presented) A device as claimed in claim 1, wherein the light-emitting surface is disposed in a path of light emitted by the diode.

14. (Previously Presented) A light-emitting device comprising:

PATENT LAW
GROUP LLP
200 N. FIRST ST.
SUITE 200
SAN JOSE, CA 95134
(408) 263-0480
FAX (408) 263-0481

a semiconductor light emitting diode capable of emitting light of a first wavelength,
the semiconductor light emitting diode having a light-emitting surface, and

a plurality of regions of phosphor provided on the light-emitting surface, wherein:

the plurality of regions of phosphor are capable of converting light of the first
wavelength to visible light of a second wavelength;

the plurality of regions of phosphor form a chessboard pattern; and

the plurality of regions of phosphor are separated by regions of the light-
emitting surface without phosphor.

15. (Canceled).

16. (Previously Presented) A device as claimed in claim 14, wherein the regions of
the light-emitting surface without phosphor are at least partly covered with a light-
transmitting layer.

17. (Previously Presented) A device as claimed in claim 16, wherein a thickness of
the light-transmitting layer is substantially the same as a thickness of phosphor in the regions
of phosphor.

18-19. (Canceled).

20. (Previously Presented) A device as claimed in claim 1 wherein the phosphor
layer provided on a first portion of the light-emitting surface is a first phosphor layer, the
device further comprising a second phosphor layer provided on a third portion of the light-
emitting surface, the second phosphor layer being capable of emitting light of a third
wavelength.

21. (Previously Presented) A device as claimed in claim 14 wherein the plurality
of regions of phosphor comprises a plurality of regions of a first phosphor, the device further
comprising a plurality of region of a second phosphor, the second phosphor layer being
capable of emitting light of a third wavelength.

PATENT LAW
GROUP LLP
2035 N. FIRST ST.
SUITE 223
SAN JOSE, CA 95134
(408) 342-0000
FAX (408) 342-0411

22. (Canceled).

23. (Previously Presented) A light emitting diode comprising:

a light-emitting surface through which light is emitted, and

a phosphor layer provided on a first portion of the light-emitting surface, wherein:

the light emitting diode is configured such that light of a first wavelength is emitted through the light-emitting surface;

the phosphor layer is configured to convert light of the first wavelength to visible light of a second wavelength;

a second portion of the light-emitting surface is without the phosphor layer;

and

the second portion is substantially surrounded by the first portion.

24. (Previously Presented) A device as claimed in claim 23, wherein the second portion without the phosphor layer is distributed over a plurality of regions on the light-emitting surface.

25. (Previously Presented) A device as claimed in claim 24, wherein the plurality of regions form a pattern.

26. (Previously Presented) A device as claimed in claim 23, wherein the second portion without the phosphor layer is at least partly covered with a light-transmitting layer which is capable of spreading light incident on said second portion.

27. (Previously Presented) A device as claimed in claim 1, wherein the light-emitting surface is a surface of the semiconductor light emitting diode.

PATENT LAW
GROUP LLP
2035 N. FIRST ST.
SUITE 225
SAN JOSE, CA 95134
(408) 382-0180
FAX (408) 382-0181